

ABSTRACT OF THE DISCLOSURE

An electron-emitting device in which the specific capacitance and the drive voltage are reduced, and which is capable of obtaining a finer electron beam by controlling the trajectory of emitted electrons. An electron-emitting portion of an electron-emitting member is positioned between the height of a gate and the height of an anode. When the distance between the gate and a cathode is d ; the potential difference at driving the device is V_1 ; the distance between the anode and the substrate is H ; and the potential difference between the anode and the cathode is V_2 , then the electric field $E_1 = V_1/d$ during driving is configured to be within the range from 1 to 50 times $E_2 = V_2/H$.